

REMARKS

Claims 1, 3, 4 and 7 – 12 are pending in this application. The Examiner has rejected Claims 1, 3, 4 and 7 - 12 pursuant to 35 U.S.C. § 103(a) as being unpatentable for obviousness over U.S. Patent 4,522,196 [Cunningham, et al.] in view of U.S. Patent 6,447,444 [Avni, et al.]. The Applicant respectfully traverses the stated rejections for the following reasons.

Applicant herewith incorporates the previously stated reasons in support of patentability recited in the RESPONSE TO FIRST OFFICE ACTION dated May 6, 2003, Pgs. 7 – 9 and the RESPONSE AFTER FINAL ACTION WITH REQUEST FOR CONTINUED EXAMINATION dated December 3, 2003, Pgs. 7 -9. The cited patents, taken singly or in proper combination, do not negate the patentability of the presently pending claims as listed above. A detailed discussion of the rejections follows.

Applicant agrees, generally, with the Examiner's statements concerning the elements and limitations of the claims that are not recited in Cunningham. See, Pgs. 2 – 3 of OFFICE ACTION dated December 17, 2003. The Examiner makes up for this long list of deficiencies by attempting to convert the teaching of **draping** the disposable cover 28 of Cunningham to one of having the cover 28 be **expandable** over the opening and along the length of the camera system. Nowhere in Cunningham is there any description whatsoever about the material composition of the cover 28 or that it possesses the property or capacity to be sufficiently elastic so as to be expandable over and along the camera system. This is especially untrue in the area of the concentric rings of Cunningham that are precisely configured to fit within one another and be supported in position by opposing rings having central apertures to maintain the optical clarity along the optical path of the camera system.

Further, the property or characteristic of "being free of wrinkles" does not absolutely translate to a material being elastomeric. It may also be rigid and remain wrinkle-free, or the material may resist fold-over to remain wrinkle-free. In fact, it appears from the description in Cunningham at Col. 3, Line 61 through Col. 4, Line 13 that it is the discs 42, 46 that substantially reduce the wrinkles in the cover 28 and not the material itself.

The attempt by the Examiner to bootstrap a very limited description of a "resilient" sheath of Avni, by appending such description of onto the device of Cunningham, is misplaced and inappropriate. The resilient sheath of Avni is configured such that its tip responds to bending of the endoscope and to pressure to "open" the tip to expose the end of the scope. This is entirely different than the elastomeric material described and claimed as part of the present invention. To overcome this apparent problem in matching material property disclosures, the Examiner reaches to publicly available information about elastomeric materials and cites these general references in further support of the rejection. However, the Examiner's listing of the "plethora" of examples of elastomeric materials within the claimed range is also without merit as not one of these materials meets all of the stringent limitations of the present invention.

The "general purpose silicones" cannot be appropriately utilized in the present application due to the fact that elastomeric, optically clear silicones, especially of the recited durometer and mil thickness, have sever "blocking" characteristics, i.e., they are inherently sticky, and will not easily slip over the camera system and/or will be more highly susceptible to tearing due to the significant increase in surface friction. When anti-blocking agents are added in sufficient quantity to de-tackify these silicone films, the films become hazy and are no longer optically clear. Since optical clarity is a critical limitation of the invention, the silicone films do

not meet the requirement and cannot be used. Further, the elongation property is not suitable as this will result in the likely tearing of the film as it will not expand to the appropriate dimension to accommodate the rings.

The Deerfield Urethane films are also not suitable as they are described as being "translucent matte" which is not an optically clear material. The terms translucent and transparent are not interchangeable when speaking of optical clarity. Finally, polyethylene or polyolefin films are also not suitable for the reason that as a group of "plastics" they are not sufficiently elastomeric or have sufficient "memory" capacity to perform as an optically clear film. These polyethylene films usually are stretchable in only a single direction, which causes significant optical distortion. Further, as single direction stretching occurs, the likelihood of tearing increases as the film cannot stretch in the orthogonal direction. Thus, the Examiner's plethora of examples all fail to meet the recited limitations of the property and characteristics of the elastomeric film of the present invention.

The examiner attempts to recoup this inaccurate application of material properties by citing to Avni at Col. 9, Lines 25 – 40 in which examples of flexible, elastic materials are given to be polyethylene or silicone. These materials are used in the outer sheath of Avni that does not cross the optical path, but is opened to permit an optical path from the camera system to the object to be viewed. Further, these materials are proved above to be inappropriate in use as claimed as none meet the recited limitations of the various material properties and characteristics of the special elastomeric material of the present invention. In addition, there is no mention in Avni at the cited section of any elastomeric **urethane** as called for in the claims. Without even the most indirect suggestion of utilizing a urethane as an elastomeric material, the citation fails to promote any obviousness rejection.

Further, Avni does not recite any of the plurality of material required characteristics or properties of the present invention in the cited Section, Col. 9, Lines 25 – 40. Neither does Avni recite such limitations elsewhere. Absent such disclosure or teaching the reference cannot be found to support the rejection for obviousness. Thus, the purported elements and limitations that the Examiner attributes to Avni, et al. are inaccurate and incorrect. The Examiner references Column 9, Lines 25 - 40 of the Avni to support the premise that “an optically clear elastomeric film may be made from a material selected from a group of elastomeric urethanes including polyether or polyester based aliphatic, polycaprolactate aliphatic, cycloaliphatic or aromatic, or any blend thereof.” The cited section of Avni is discussing the use of polyethylene or silicone sheet material, which may be used in manufacturing the tube-like sheath. Urethanes, or polyurethanes, are usually crystalline compounds that are considered to be antineoplastic agents and, as such, would not exhibit the optical clarity required of the present invention. Avni does not even consider polyurethane to be used in the sheath material. Thus, lacking any support in the cited Avni, et al patent, it is not a proper reference and it is not applied in a manner consistent with its teachings.

Based upon the foregoing analysis, the Avni et al. patent cannot stand as a secondary reference to Cunningham as it does not fairly describe, teach or suggest the physical characteristics and/or properties of the structural elements of the claim, nor does the combination of Cunningham and Avni fairly describe, teach or suggest the required limitations of the structural elements of the claims, or the physical properties and characteristics of the material of the sheath of the invention. Hence, the claims recite a novel and non-obvious combination of structural elements exhibiting physical characteristics and properties that are not

found in the cited reference patents, or in the appended printed materials describing the sheath materials suggested by Avni.

As to the rejection for obviousness of Claim 9 – 12, the foregoing argument concerning the teachings of Avni, et al. patent are well founded and are incorporated to rebut the stated rejection. The article of manufacture claims contain a number of structural elements having physical characteristics and properties that are not contained at all in the Avni, et al. patent. Hence, these claims also recite a novel and non-obvious combination of structural elements exhibiting physical characteristics and properties that are not found in the cited Ailinger, et al. patent.


For the reasons set forth above in the foregoing argument concerning the correctness and applicability of the grounds of rejection set forth by the Examiner in the most recent OFFICE ACTION, favorable reconsideration of this application and an early NOTICE OF ALLOWANCE is earnestly solicited.

Respectfully submitted,

MITCHELL C. CALDERWOOD

DATE: **June 17, 2004**

BY:



Sanford J. Piltch, Esq.
Reg. No. 29,997
1132 Hamilton Street - Suite 201
Allentown, PA 18101-1024
TELEPHONE: 610-433-6266
FACSIMILE: 610-820-9566

ATTORNEY FOR APPLICANT

PATENT APPLICATION
SERIAL No.: 09/809,505
FILING DATE: 03/15/2001
EXAMINER: K. P. Odland

CERTIFICATE OF MAILING

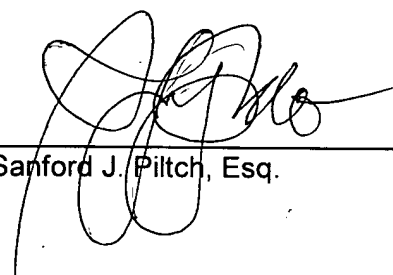
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to:

MAILSTOP – Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on the date indicated below.

DATE: **June 17, 2004**

BY:



Sanford J. Piltch, Esq.